

HARVEST COMMENTS

Introduction

We view all human-caused mortality as "harvest", yet we see the federal government treat non-fisheries caused mortality very differently than fisheries. The dams are allowed to kill vast numbers of listed salmon far greater than the treaty fishery. At this time, it appears that NMFS' BiOp for the federal hydrosystem will push the recovery burden from hydropower to the tribes' who have no long term certainty for meaningful fisheries.

In the interest of salmon conservation, the tribes have voluntarily forgone commercial fisheries on summer chinook since 1964 and spring chinook since 1977. Yet, since 1964 when the tribes closed their commercial summer chinook fishery, massive hydropower development was completed in the Columbia Basin, including the Canadian Treaty storage projects, John Day Dam, and three of the four Lower Snake River dams. Now the recovery picture for Snake River salmon is dominated by hydropower and restricting tribal fisheries even further has only "token" value.

The costs of operating the hydropower system must be internalized and not shifted to the tribes or the regions' salmon resources. From the tribes' perspective, the environmental baseline for their fisheries and the standards for resource restoration and protection were set under the treaties with the United States in 1855.

The draft BiOp and All H Paper create a dams versus harvest scenario for fall chinook and steelhead, yet the same documents ignore the fact, acknowledged by the federal agencies, that spring chinook won't recover in the absence of all harvest. It won't work. The only healthy stock in the upper Columbia, upriver bright fall chinook, is the only stock that we commercially fish. Nevertheless, we still remember the years when these chinook were so depressed that the tribes went to the Ninth Circuit over a one day fishery. After that, the parties agreed to take meaningful actions to protect and rebuild the run and (despite NMFS' scientists' anti-production views) have succeeded. We are also making progress with Snake River fall chinook, because after the 1994 tribal/federal blow-up in federal court, the parties committed to Snake River fall chinook production actions and entered them as a court order.

It is time for the federal government to step forward and commit to immediate actions in the other three H's to rebuild the salmon runs to havestable levels in a manner that fairly shares the conservation burden among all H's.

Section 5.3.4 - Environmental Baseline - Harvest Effects

This section presents a skewed description of the history of Columbia River Basin salmon fisheries. The history of fisheries did not begin with European development as presented in the draft BiOp. The Commission's member tribes have fished at usual and accustomed fishing places along the Columbia and its tributaries for time immemorial. For thousands of years, tribal peoples applied their extensive knowledge of the natural world to fisheries practices and management. Salmon (along with plants and animals) were, and still are, revered by tribal peoples. Salmon are part of the tribes spiritual and cultural identity and provided them with sustenance and wealth for thousands of years. Annual tribal harvests of salmon were in the millions and yet the resource flourished. NMFS has available to it numerous sources to assist it in providing an accurate history (see, e.g., *Wy-Kan-Ush-Mi, Wa-Kish-Wit* (CRITFC 1995), *Tribal Circumstances and Impacts of the Lower Snake River Project* (Meyer Resources, Inc. 1999)) but choose to ignore them, even though the Corps of Engineers included a partial history of tribal fisheries when it wrote the 308 Reports that lead to development of the FRCPS.

Could development of the basin be a factor in that spring chinook were able to withstand up to 60% harvest rates from 1938 to 1955 but can no longer or that summer chinook has not been targeted for commercial fisheries for almost four decades?

We are troubled that NMFS would use the states' description of tribal fisheries when tribal and even less biased federal versions are available. There is no mention of *United States v. Oregon*, which has governed mainstem treaty fisheries for over 30 years.

The last two paragraphs get at the issue of the allocation of the conservation burden. Theoretically a population can be sustained at a number of levels as long as escapements are maintained. However, that misses the fact that the allocation burden has been shifted over time on to harvest as other activities take more of the sustainable mortalities. There is no discussion of how harvest management has changed over the past few decades to a weak stock management approach where mixed stock fisheries are managed to protect the weakest stock of concern. NMFS must recognize the actions harvest managers have taken to address the needs of weak stocks, often at significant cost to treaty fisheries. Indeed, for over 20 years, tribal fisheries management has address declining stock abundance where others have ignored it.

Section 9.5.2.7 Offsite Mitigation -Hatcheries and Harvest

The proposed action is for the action agencies (USACoE, BPA, BoR, NMFS), with the assistance of NMFS and USFWS to annually develop 1 and 5 year plans for hatchery and harvest measure that provide offsite mitigation. NMFS explains that the specific measures and programs for the 5 year plan are found in the All-H Paper. See our comments on the All-H paper. It appears that only the 1 year plan is to be consistent with

provisions established in *U.S. v. Oregon*. If the parties to *U.S. v. Oregon* work out a long term management plan that is entered as a court order, the tribes expect the federal government to abide by those terms. See our comments on the All-H Paper for further elaboration.

Section 9.6.3 - Overview of Harvest Measures

The RPA relies on the harvest management approach contained in the All-H paper without much detail other than to cap ocean and inriver harvest rates at or below recently set levels and to rely on selective fisheries. See our comments below regarding the approach taken in the All-H paper.

This section fails to emphasize that significant harvest reductions have already been made in order to minimize impacts to listed and other weak naturally spawning stocks. These reductions have come at enormous cost to the tribes and have impacted the fishing community to a much greater extent than whatever efforts the action agencies have made has impacted the Hydro system. Proposing further harvest cuts to mitigate for the failure to achieve survival by changing the hydro system only adds insult to injury.

Further it appears that NMFS assumes that ocean survival rates will remain constant. A similar assumption made by the PSC in the 80's for the recovery of depressed stocks did not come true. Changes in ocean conditions were not factored there and neither are they here. A harvest rate cap alone will not recover the stock as other environmental conditions could continue to decline thereby causing the stocks to get depressed even further.

The implicit assumption in this document is that "selective fisheries will reduce impacts on listed stocks". However, this assumption is not necessarily true. Models are sensitive to the assumptions of the parameters. For example, the wide range in the estimates of the hooking mortality parameter and how it may vary from ocean to estuarine to freshwater areas, makes it difficult to accurately estimate the impacts. It is premature to assume that selective fisheries would reduce the impacts to listed stocks significantly.

From the RPA it is evident that the future fisheries structure proposed is a selective fishery targeted towards hatchery fish or marked stocks. However, there are a few key issues that are not being considered when considering mark selective fisheries. They are identified here.

The primary issue of concern is maintaining the viability of the coded-wire-tag (CWT) program. Due to efforts directed to harvest marked stocks, estimating fishing mortality for unmarked stocks is difficult. Thus, selective fisheries could bias the exploitation rates that are derived from the CWT recoveries. In a workshop jointly held by WDFW and the tribes in October 1999, it was pointed out that:

"BPERs (Base Period Exploitation Rates) are estimated from CWT data collected under conditions where all legal fish brought to the vessel are assumed to be retained. A fish

was encountered only once; when it was caught, it was removed from the population. Under mark-selective fisheries, an unmarked fish is supposed to be released. Some of the unmarked fish will die, others survive and will become susceptible to recapture again. When discrete equations are used to model impacts of mark-selective fisheries on unmarked fish, this potential for *multiple recapture* during a model time period is ignored. Drop off and release mortality are underestimated and exploitation rates are biased low as a result. The likelihood of recapture will increase the longer the time period represented in discrete models (the time strata commonly modeled is monthly for coho, quarterly or yearly for chinook). The higher the exploitation rate, the greater the bias”.

The SFECAWG (Selective Fisheries Evaluation Committee Analytical Work Group) is investigating and developing methods to answer these biases. Although a couple of theoretical approaches are in the process of being developed for these methods, the optimism value attributed to selective fisheries in the draft BiOp is premature. A valid method for determining the amount and effect of potential bias in a real world situation is far from being developed, let alone being tested.

Another issue is the multiple encounter bias that exists in all management models presently used. To address this issue, a simulation was developed (appendix A) that shows how with a complex array of fisheries, the modeled impacts will always be lower than the true impacts. These estimates are directly related to the duration of the mark selective fisheries and differences increase at higher targeted harvest rates. In addition, the impacts increase non-linearly when unmarked stocks are at critically low abundances (an issue that is pertinent to some of the Snake River stocks). There are ways to getting around this (shown in appendix A), but actually implementing this into the coastwide chinook models could be a logistical nightmare, due to the numerous stocks and fisheries involved

The release mortality on hooked fish is also an unresolved issue. Estimates differ by fishery area and gear type. Our understanding of these effects is far from perfect. In fact, the range of effects pointed out by both the Salmon Technical Team, STT (PFMC Report B2, March 2000) and the Chinook Technical Team (CTC, PSC Report (97)-1) is large. Appendix B (table 1) shows the vast range of effects of hooking mortality by area and gear.

In conclusion, there are several key questions that need to be addressed to accurately estimate the impacts of selective fisheries on individual stocks. The value of selective fisheries as a recovery tool is unproven. Past examples, such as Columbia River steelhead, indicate that solely implementing selective fisheries without making changes in other aspects of the life cycle will do little to stop the decline of the natural populations.

Section 9.6.3.2 Measures to Assist in the Further Reform of Harvest

The wording of this section gives the implication that harvest management has been operating in the dark ages and has just suddenly thought of the notion of "reform". As with other sections of the BiOp, NMFS continues to ignore the substantial efforts harvest managers have made to protect weak stocks and that they did so when no other source of mortality was willing to do anything for salmon if it impacted associated economies.

9.6.3.2.1 Measures to Address Effects of Selective Fishing on Fishery management Systems (e.g. Fishery Management and Stock Assessment Models)

This raises the primary issue of concern is accurately modeling the impacts of mark selective fisheries given the uncertainty in parameter estimates. The issue of modeling multiple encounters and release mortalities are particularly difficult.

Another issue is sampling concerns. Both methods currently being developed by the SFECAWG, rely on non-selective fishery data to get an accurate assessment of unmarked mortalities. Without this non-selective fishery data of unmarked tagged fish (DIT groups), there is no way this method would work. In addition each entity throughout the migration pattern of the fish would need to change to electronic sampling. At present, there is no coastwide commitment. Problems with electronic sampling of larger chinook also need to be worked out.

For accurate estimation we need a non-selective fishery to establish the marked rate. To get at this marked rate, a sufficiently long non-selective fishery that adequately covers most of the migration and provides age specific mortalities. In order to accurately estimate impacts, a sampling rate of at least 30% across all fisheries is needed. Less than a 30% sampling rate results in a loss in the accuracy of unmarked mortalities and may compromise the use of the CWT database for chinook management.

9.6.3.2.2 Measures to Develop or Expand the Use of Selective Fishing Methods and gear

In the action item it states, "...enable the harvest of non-listed fish in ways that are benign to listed fish." If this section intends to include mark selective hook and line fisheries, benign is not the appropriate word to use. The Oxford Online dictionary defines benign as, "pleasant and kind; not harmful or severe or in the medical sense, not likely to result in death." If release mortality rates range from 10-over 25%, they should not be considered benign. Certainly a tumor with a 10-25% mortality rate would not be considered benign.

The next paragraph begins by discussing live capture gear and then jumps into discussing Steelhead selective fisheries which are conventional hook and line fisheries. While the fish is usually still alive when landed, it has by definition been injured and often does not survive the experience. This is not really a "live capture gear" in the same sense as traps or seines. The following paragraph begins with, "Similar live-catch fishing strategies ...", which appears to again refer to steelhead selective hook and line fisheries. This

section is confusing. If by live-capture gear NMFS means gear that is not designed to physically injure the fish, NMFS should say so and avoid discussion of hook and line fishing. If NMFS means to include hook and line fishing, then avoid the term live capture and use a term such as, “not 100% lethal”.

It should also be noted here since NMFS chooses to bring up steelhead selective fisheries, that steelhead selective fisheries were implemented in 1982-1983 in most parts of Oregon and Washington. This is a decade before most steelhead stocks were listed. Selective steelhead fisheries have done nothing at all to restore naturally spawning steelhead. They may have been partially successful at sustaining recreational fishing opportunity, but not at restoring naturally spawning fish populations. NMFS should not use steelhead selective fisheries as an example of successful or even appropriate management under the ESA.

Further, steelhead mark selective fisheries are assumed to have small impacts (<5%). Supporting information is lacking. Given the assumed small impacts and the continued decline of natural steelhead populations, this provides more evidence that other recovery actions must be taken to achieve recovery.

Gillnet exchange programs are one way to shift impacts on selected stocks. The economic feasibility on changing methods must be considered, as well as the legal and social consideration of who participates in the fishery.

9.6.3.3 Measures to Provide Alternative Fishing Locations

This section ignores the enormous problems this would cause because of the fact that tribes can only fish in their Usual and Accustomed Fishing Areas. In addition tribes and their fishermen maintain fishing sites that have cultural and spiritual significance that can not be disregarded. Tribal fisheries are by nature place oriented fisheries. It is not possible for one tribe to simply shift its fishery from one location where stocks may be co-mingled to some other terminal area possibly in another tribe’s U&A. This section disregards treaty rights, case law, as well as tribal traditions.

It is also a very unusual choice that NMFS made in bringing up Oregon’s select area fishery in Youngs Bay. The early select area fisheries target Rogue River stock hatchery chinook. NMFS mentions this as an apparently successful or desirable example of a terminal fishery minimizing impacts on listed stocks. In NMFS documents and communications too numerous to cite (including this one), NMFS goes on and on about the terrible dangers and risks of allowing the use of non-local hatchery stocks that could potentially interbreed and diminish the fitness of the NMFS-approved wild stocks.

9.6.3.4 & 9.6.3.5

In the paragraph following the Action item, it states, “...greater selectivity in a given fishery can potentially be used for either or both of two objectives: 1) achieving a higher catch of non-listed abundant fish while staying within a harvest rate cap on listed fish; or

2) further reducing the rate of incidental harvest impacts on listed fish, given a particular level of catch.” It is not possible to do both. You can not simultaneously maximize the harvest of hatchery fish and minimize the mortality of non-target naturally spawning fish. This is a fallacy that is continually foisted on the public by proponents of mark selective hook and line fishing.

The final section discusses a concept that appears to state that reductions in impacts on listed stocks could potentially be credited to the FCRPS offsite mitigation performance standard. Does this mean that reducing fishing mortality would somehow negate the need to reduce mortality in the hydro system and if fishing mortality is indeed reduced we would act as if it was the hydro system that reduced mortality? This section needs clarification.

Further, the idea of crediting harvest reductions to the hydrosystem operators shifts the allocation of the conservation burden to the fishery. This violates the tribes' treaty rights and the federal government's trust responsibility.

Appendix C Spreadsheet for Fall Chinook

There are several inconsistencies in comparing the analysis done in Appendix C with the Biological Opinions for harvest actions. There are inconsistencies in the methodologies used to determine the harvest rate impact and in the base period used. In order to avoid confusion, these inconsistencies should be noted and explained in the BiOp.

The Columbia River adult harvest rate for Snake River fall chinook is based on expansion of coded-wire-tags. The rates calculated are much lower than the rates used by the Technical Advisory Committee (TAC) of *U.S. v. Oregon*. TAC reviewed the data for in-river fisheries and concluded that the Hanford Reach tags were representative for all upriver bright fall chinook. The rates used by TAC are the same for Hanford Reach fall chinook. The reasons included that the sample size was more representative and that the Priest Rapids Hatchery fish are more reflective of Snake River natural fish because of changes in release strategy at Lyons Ferry Hatchery. Priest Rapids Hatchery releases subyearlings, while the majority of the release at Lyons Ferry has been yearlings. For the last several years groups of tagged subyearlings were released at the hatchery and in natural production areas. TAC will analyze the results of the returns for these groups and compare the results to the Hanford Reach tag groups,

The CRI Spreadsheet uses a 93-96 average (.174) to determine the harvest level for Snake River fall chinook. The rate is meant to reflect the changes in harvest due to the listing of the population. The spreadsheet compares this to the 1982-1996 average (.315). In the harvest biological opinions for both ocean and in-river fisheries the criteria used is a 30% reduction from the 1988-1993 base period. For in-river fisheries this is calculated to be a 31.29%. For ocean fisheries this is represented by an exploitation rate index for Lyons Ferry tags for 3 and 4 year olds.

Comments on Volume 2 of the Conceptual Recovery Plan (All-H Paper)

The harvest section begins by asserting that only harvest options pose difficult challenges. Why is it that only harvest poses difficult challenges in the context of the intuitive logic that killing fewer listed fish is better? Why not hydro? Land management is generally not a "mixed stock fishery;" land management impacts focus primarily on listed fish. Also, the first paragraph is larded with innuendo regarding so-called recent reforms of alleged harvest abuses. The fact is, for decades harvest managers were the only entities managing for weak stocks. That there continues to be a difference in opinion regarding how fine a scale weak stock management should or even can be, does not detract from the long-standing efforts of fishery managers.

The federal caucus asserts that harvest reductions provide the quickest, surest method of increasing near-term adult escapement. This argument has been made for years. The states made similar arguments when they sought to restrict treaty fisheries back in the 60's and 70's. The United States made it in front of Judge Marsh during the 1994 Fall Season dispute. Six years later, the vast majority of the reforms requested by the tribes for other sources of mortality still have not occurred. Despite decades of very low harvest levels on upriver spring and summer chinook, the runs have continued to decline, not increase in escapements. The tribes continue to look for some improvements in the other H's to take effect.

The All-H paper notes that harvest rate caps are not "catch entitlements" nor are they intended to permit any particular level of incidental take "when lesser impacts are feasible and practical." There is no discussion of what is this "feasible and practical test" or how it is to be applied. Will it applied in the same manner to all the H's? The issue of what constitutes "feasible and practical" goes to the heart of the showings that must be made in the CNP analysis prior to further restrictions on treaty fisheries. Examination of the All-H paper and draft FCRPS BO indicates that this "feasible and practical" test has not been applied to other activities. The economic decisions regarding what is "doable" by the FCRPS have been largely made behind closed doors and are not immediately apparent from examination of the BO. Fishing costs and profits play little role in determining permitted levels of incidental take stemming from harvest.

The All-H Paper clearly distinguishes ocean fisheries from in-river fisheries. Because ocean fisheries are negotiated internationally whereas in-river fisheries depend upon the status of the runs, only in-river fisheries are subject to conservation restrictions according to annual run size.

It is obvious from the All-H Paper and the draft BiOp that implementation of more selective fisheries is being sold as a means of better protecting listed fish while increasing catch. Both documents state that the fishery managers and the FCRPS action agencies should work together to implement efforts for more selective fishing gear or expanding fishing opportunity in known-stock terminal areas. It is unclear whether this in lieu of or in addition to existing mainstem treaty fisheries? Who gets "credit" for this restriction of treaty rights? Why are the FCRPS agencies involved at all? Apparently, it is cheaper for

the Feds to pay for more selective gear or expanding opportunity for terminal fisheries than it would be for the Feds to increase adult returns by reducing the mortality they inflict. Such an approach is contrary to the conservation principles regarding restrictions on treaty fisheries.

There is also an implication that more monitoring and evaluation of harvest for adaptive management purposes is warranted. In fact, the All-H Paper implies that harvest has not been managed adaptively. When the FCRPS and other sources of mortality begin to conduct their operations with regard to annual escapements, then the Federal Caucus can make such implications regarding harvest. Until then, they should acknowledge that harvest managers are the only entities that manage adaptively. Finally, there is again an implication that the FCRPS action agencies will pay for this additional M&E and receive a "credit" for doing so.

Increases in harvest are contingent upon greater abundance, "provided the recovery effort is not unduly impeded." This standard is not applied to the other H's. The All-H Paper should consider ramifications of mandating an abundance-based, selective-killing approach for the non-harvest H's. The FCRPS is the biggest mixed stock killer of them all. It exercises its impacts in a manner that is significantly less sensitive to abundance than harvest. Land management impacts focus primarily on listed species and do so with little regard for abundance. In fact, in most cases the land managers argue that impacts will be negligible or non-existent due to the virtual absence of listed fish within individual project areas.

Of course the real test of the strength of one's stomach is the discussion of the Feds' trust responsibility to the tribes. The tribes' treaty rights are not a national legal obligation but "a major policy challenge for the region." The Paper implies that there is a thorough discussion of the government's trust obligation to the tribes in the Government to Government consultation section of the Paper (p. 104-130). This is not true. In fact, the consultation section of the All-H Paper confirms the tribes' position that, from the highest levels of the government on down, consultation means nothing more than holding a meeting.

The All-H Paper declares that it "attempts to balance the conservation of listed fish with the Federal government's trust obligation to provide meaningful tribal harvest, both today and in the future". But in striking its "balance," the All-H Paper insinuates that further restrictions in treaty harvest are needed but not recommended:

Where tribal fishing is involved, we recommend accepting a level of risk that is greater than the biology might strictly imply. Specifically, some populations are at such critically low levels that biological analyses supports a strong argument that all harvest should be eliminated (e.g., Snake River spring/summer chinook; upper Columbia spring chinook). Nevertheless, the Conceptual Recovery Plan recommends an acknowledgment that there is an "irreducible core" of tribal harvest that is so vital to the trust obligation that the federal government will not eliminate it. For other populations, the biological analysis shows they can

withstand some level of harvest. When tribal fishing is involved in those cases, the Conceptual Recovery Plan again recommends allowing a level of tribal harvest that respects the trust obligation, even though it means tolerating some additional risk and/or slowing the pace of recovery.

(p. 38-39). The management measures in the other H's aren't being measured in terms of their effect on the rate of recovery. Instead, there is much more of a focus on whether the benefit that might be achieved is worth the cost. Note that cost is rarely, if ever, a consideration in deciding whether to restrict treaty fisheries. The language about the tribes' fisheries being biologically unjustified must either be removed from the All-H Paper or placed in the lap of every other activity that affects salmon yet is allowed to continue even if they have any effect on the rate of recovery. The Federal Caucus must examine all actions from the standpoint of how they affect the pace of recovery (and rebuilding).¹

As mentioned earlier, ocean fisheries appear to be managed under a different standard than in-river fisheries. The BiOp on the PST agreement determined that harvest impacts to Snake River fall chinook "will not prevent recovery" of this ESU (p. 41). Is there a difference between a fishery that "will not prevent recovery" and one that will not "unduly impede" the rate of recovery. To what extent will the FCRPS agencies be coming back to the ocean fisheries to "acquire" concessions needed to fulfill its off-site mitigation obligations? Are ocean fisheries "immune" from any further restrictions? Are ocean fisheries a part of the environmental baseline? How does one reconcile the concept of "grandfathering" the environmental baseline with adaptive management?

The first paragraph of page 42 concedes that in-river harvest of salmon is a mere remnant of what it used to be and the majority of this remnant remainder consists of treaty fisheries. Still, the paper states that runs are in such poor condition that many of the listed ESUs "simply cannot withstand any significant harvest impact, especially given all the other factors likely to affect them for many more years." This is a pretty clear signal that the tribes are left with their finger in the dike while everyone else heads for high ground. In effect, everyone but the tribes has become a part of the environmental baseline. The Paper goes on to say that "[i]n all cases, management of fisheries must be keyed to the status of listed natural runs." Although inriver fisheries have been the only activity managed according to annual run size, this standard is not applied to the ocean fisheries or any other H. Perhaps the reason why the use of the environmental baseline concept in the FCRPS BO is so amorphous, is because, if treaty fisheries are in the baseline, then major reductions in FCRPS mortality is required to avoid jeopardy, and if the tribes are not in the baseline, then NMFS' decision to put the FCRPS first is clearly inconsistent with federal trust obligations and discriminatory.

On page 43, the All-H Paper states that treaty and non-treaty fisheries should continue to be managed conservatively within the impact limits identified in the harvest BO.

¹ Note that rebuilding to harvestable levels to satisfy treaty obligations is not a management objective.

Like NMFS' biological opinion on the [2000] spring fishery, this conceptual recovery plan is strongly informed by recent CRI analysis. That analysis confirms that spring chinook ESUs are in extremely dire shape, having a substantial risk of extinction even in the near term. CRI also confirms that harvest reductions taken in previous years substantially benefited these now-listed populations -- in some cases probably preventing them from already becoming extinct. Given the low level of current fisheries, however, further reductions in spring fishery harvest rates would have relatively small, albeit potentially important effects on the growth rates of affected ESUs. On the other hand, because even modest increases in harvest rates could easily thwart the overall recovery effort, especially in the next several years and no matter what is done in the other H's, it will be necessary to cap harvest rates in spring fisheries for some time, while continuing to seek and take advantage of any opportunities for further reductions in harvest rates.

Once again it is apparent that NMFS intends for the inequitable allocation of conservation to continue for the foreseeable future.

While NMFS opines that the 2000 harvest rate of 17% on Group-B steelhead is probably still appropriate, it asserts that yet to be completed analyses may produce evidence indicating that further harvest reductions are necessary (p. 44). In fact, the Paper states, two pages later, that "CRI analysis concludes that the extinction risk is unacceptably high for these ESUs,² and that lower harvest rates on steelhead may be needed" (p. 46). Why is harvest the only activity that is managed to protect Group-B steelhead? No other activity effecting the Snake River steelhead ESU is required to manage for a subcomponent of the listed species.

The Paper states that the jeopardy standard for fall chinook is a 30% reduction from the 1988-93 base period (p. 44). The Paper notes that harvest of fall chinook ranges between 40-50% (all fisheries combined) and that this is "undeniably high" for a listed stock. "For this reason, the recommendation to allow incidental harvest rates at recent levels requires careful examination and justification in relation to the overall recovery effort for this ESU." (p. 44-45). This indicate that one cannot responsibly set a harvest rate for fall chinook without considering mortality from all other sources.

The All-H Paper notes that the plight of Snake River fall chinook is fundamentally different from that of many of the other listed stocks. Unlike fall chinook, harvest reductions will help prevent many other ESUs from going extinct during the period required for actions in other H's to take effect. "Indeed, that is the principal underlying rationale for continuing the harvest constraints articulated throughout this conceptual recovery plan." (p. 45). For fall chinook, "there is relatively little immediate risk of extinction...under current conditions, and none of the recommended habitat measures, nor any changes in operation of the FCRPS short of breaching, will result in significant increases in the basic productivity of Snake River fall chinook." (p. 45). Even though

² The Paper is referring to the Snake River, upper Columbia River, middle Columbia River, and lower Columbia River steelhead ESUs.

NMFS believes that further significant increases in productivity, under the existing FCRPS configuration, are impossible, NMFS opines that the benefits of actions taken in the last few years to improve juvenile passage and revise ocean and in-river fisheries have not yet been fully realized or reflected in the CRI analysis (p. 46). NMFS also anticipates that "ongoing discussions" to secure water from the upper Snake may provide additional benefits. NMFS even hazards the guess that these benefits may even provide the population growth rate needed to assure survival and recovery (no mention of rebuilding). (p. 46). No support or analysis for these opinions is provided or cited.

With respect to future tribal fisheries on fall chinook, NMFS characterizes its recommendation to maintain current harvest levels as "accepting a certain increment of additional risk," but characterizes this additional risk as being "quite low." (p. 46). Maintaining 1999 harvest constraints, combined with carefully planned supplementation programs (which are intended to stabilize the population at or above current levels) will be continued for the next 8-10 years until there is a change in the status of the ESU or the habitat available to it (p. 46). Of course, the only way that the amount of habitat will change is if Snake River dams are breached. In short, NMFS proposes status quo management for fall chinook with all the long-term productivity limitations that includes. We again refer NMFS to the tribes' longstanding recommendations for measures needed to be implemented by the FCRPS to improve juvenile and adult fall chinook survival.

Increasing selective fisheries and developing new terminal fisheries appear to be tools favored by the FCRPS action agencies and a significant source of the off-site mitigation "credits" they seek. It appears that in the new federal view of the world, the FCRPS action agencies are going to be new harvest partners.

[T]he fishery managers should work with the hydrosystem operators (including the FCRPS) to develop positive incentive-based approaches to harvest management. Such approaches could better align the interests of the fisheries in catching fish with the interest of the hydrosystem in achieving offsite survival benefits for listed fish. Mechanisms should be developed that credit reductions in incidental fishery mortality on listed fish toward both the objective of reducing fishery impacts on listed fish and the objective of increasing the total catch of unlisted fish in the fishery.

(p. 49). According to the All-H Paper, the federal caucus also recommends that NMFS facilitate discussions between the fishery managers and the FCRPS action agencies to explore commercial license buy-backs, fishery conservation easements, commercial catch price enhancements and improved marketing of fish and fish products (p. 49). These discussions, if they occur at all, should take place within U.S. v. Oregon,

The proposed new role of the FCRPS in harvest management is described further in the NMFS' draft BO.

The Action Agencies shall work closely with NMFS, USFWS, Tribal and state fishery management agencies, and the relevant Pacific Salmon Technical

Committees and provide funding to address analytical problems and revise or replace current management models as necessary to accommodate selective fisheries (draft BiOp p. 9-116).

The Action Agencies shall work closely with NMFS, USFWS, and Tribal and state fishery management agencies and provide funding to ensure that impacts on catch sampling programs, data recovery systems, and data bases stemming from mark-selective fisheries are addressed (draft BiOp at p. 9-117).

The Action Agencies shall work closely with NMFS, USFWS, and Tribal and state fishery management agencies and provide funding to better estimate incidental mortalities in selective fisheries (draft BiOp at p. 9-117).

These activities generally performed by committees such as the TAC and CTC. This is federal over-reaching and illustrates how thoroughly and perversely FCRPS decision-making has become intertwined with harvest decision-making. It is clear from the All-H Paper that Bonneville, the Corps and the Bureau of Reclamation have come rooting for additional conservation in the harvest arena so that they can get their no-jeopardy call in the absence of breaching the lower Snake Dams.